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JAN 20 1968

CURRENT SERIAL RECORDS

WATER SUPPLY OUTLOOK FOR ARIZONA

and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

UNITED STATES DEPARTMENT of AGRICULTURE...SOIL CONSERVATION SERVICE,
SALT RIVER VALLEY WATER USERS ASSOCIATION
and
ARIZONA AGRICULTURAL EXPERIMENT STATION

Data included in this report were obtained by the agencies named above in cooperation with the Federal, State and private organizations listed on the last page of this report.

AS OF
JAN. 15, 1968

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season as they affect runoff will add to be an effective average. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1400 snow courses in Western United States and in the Columbia Basin in British Columbia. In the near future, it is anticipated that automatic snow water equivalent sensing devices along with radio telemetry will provide a continuous record of snow water equivalent at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data or reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

PUBLISHED BY SOIL CONSERVATION SERVICE

D. A. WILLIAMS, Administrator

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 507, 701 N. W. Glisan, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	P. O. Box "F", Palmer, Alaska 99645
Arizona	6029 Federal Building, Phoenix, Arizona 85205
Colorado (N. Mex.)	12417 Federal Building, Denver, Colorado 80202
Idaho	P. O. Box 38, Boise, Idaho 83707
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Building, Salt Lake City, Utah 84111
Washington	360 Federal Office Building, Spokane, Washington 99201
Wyoming	P. O. Box 340, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia



WATER SUPPLY OUTLOOK FOR ARIZONA

and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

D. A. WILLIAMS

ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D. C.

|||||
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STATE CONSERVATIONIST
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PHOENIX, ARIZONA

In Cooperation with

RICHARD K. FREVERT

DIRECTOR
ARIZONA AGRICULTURAL
EXPERIMENT STATION

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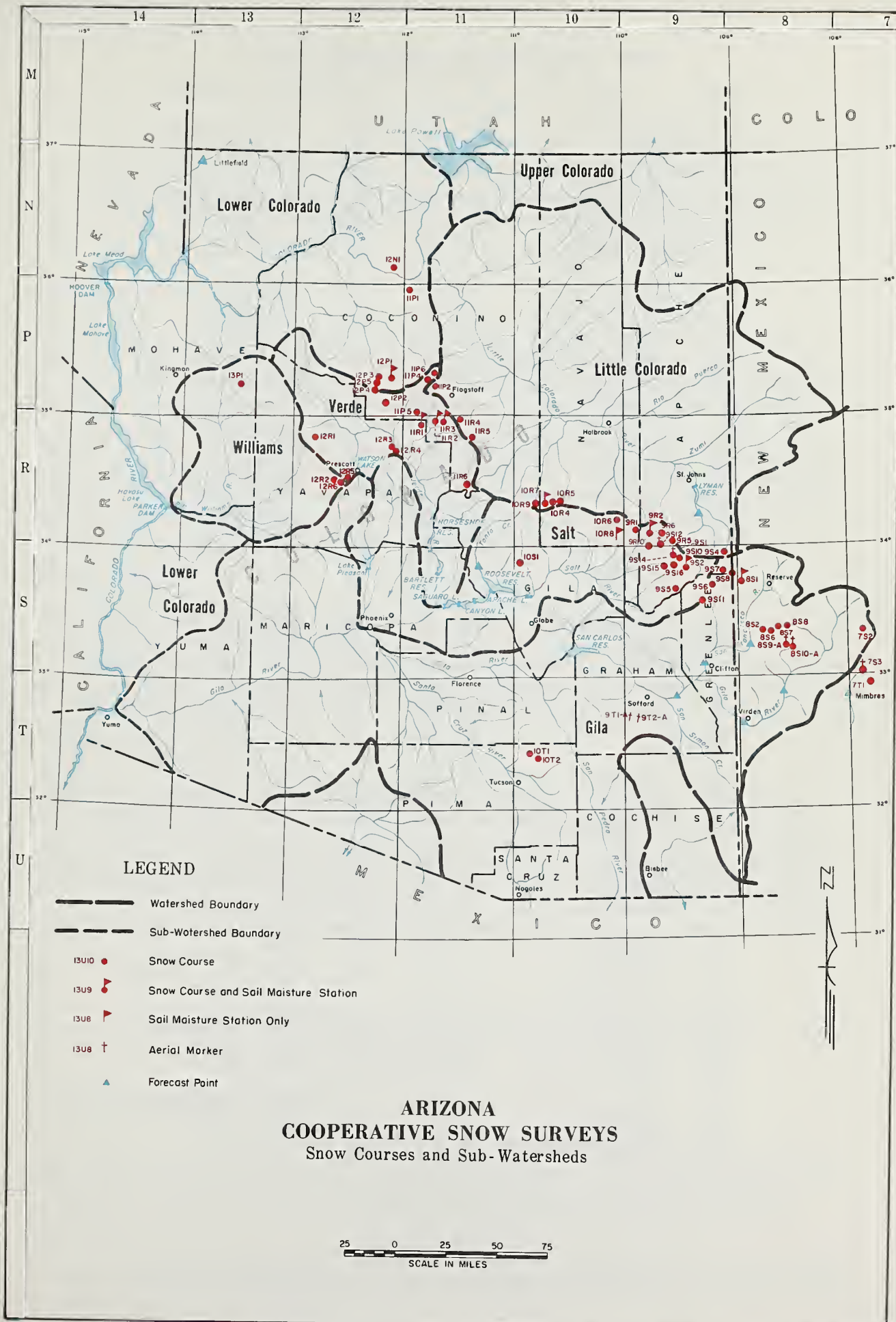
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|||||
Report prepared by

RICHARD W. ENZ, Snow Survey Supervisor

SOIL CONSERVATION SERVICE
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INDEX to SNOW COURSES and SOIL MOISTURE STATIONS

Number	Name	Sec	Twp	Rge	Elevation	River Basin
11R6	Baker Butte (p)	4	12N	9E	7300	Verde
9S1	Baldy (p)	28	7N	27E	9125	Little Colorado
9S15	Baldy #2	12	6N	26E	10000	Little Colorado
9S16	Baldy #3	13	6N	26E	11000	Little Colorado
10T1	Bear Wallow	6	12S	16E	8100	Gila
12P5	Bill Williams Intermediate	17	21N	2E	8550	Lower Colorado
12P4	Bill Williams Summit	17	21N	2E	8950	Lower Colorado
9S6	Beaver Head	13	4N	30E	8000	San Francisco
9S10-*	Black River Divide	10	6N	27E	9400	Salt
12N1	Bright Angel	34	33N	3E	8400	Lower Colorado
12R1	Camp Wood	3	16N	6W	5700	Verde
10R7-M	Canyon Creek #2	18	11N	15E	7500	Little Colorado
10R9	Canyon Point (p)	28	11N	14E	7600	Salt
11R2-M	Casner Park	19	18N	8E	6930	Verde
12P1-M	Chalender	27	22N	3E	7100	Verde
12R6	Copper Basin Divide (p)	23	13N	3W	6720	Verde
10R8-*	Corduroy Creek	4	8N	21E	6000	Salt
9S7	Coronado Trail	26	5N	30E	8000	San Francisco
9T2-A	Crazy Horse	34	8S	24E	10200	Gila
7T1	Emory Pass #1	16	16S	9W**	7800	Mimbres
7T2	Emory Pass #2	16	16S	9W**	7800	Mimbres
10R6	Forest Dale	2	9N	21E	6430	Salt
11P2	Fort Valley (p)	22	22N	6E	7350	Little Colorado
9R5	Ft. Apache	18	7N	27E	9160	Little Colorado
8S1-M	Frisco Divide	31	6S	20W**	8000	San Francisco
12R4	Gaddes Canyon	11	15N	2E	7600	Verde
10R5	Gentry	36	11N	15E	7650	Salt
11P1	Grand Canyon	21	30N	4E	7500	Lower Colorado
9S11	Hannagan Meadows (p)	19	3N	29E	9090	Salt
11R5	Happy Jack	30	17N	9E	7630	Verde
9R10	Hawley Lake	13	7N	24E	8300	Salt
10R4	Heber (p)	28	11N	15E	7600	Little Colorado
9T1-A	High Peak	34	8S	24E	10500	Gila
8S9-A	Hummingbird	19	11S	17W**	10550	San Francisco
8S6	Ice King	6	11S	18W**	8020	San Francisco
7S2	Inman	6	11S	10W**	7800	Gila
12R2	Iron Springs	22	14N	3W	6200	Bill Williams
9S2	Maverick Fork (p)	13	6N	27E	9150	Salt
7S3-A	McKnight Cabin	10	15S	10W**	9300	Mimbres
9R2-M	McNary	23	8N	23E	7200	Salt
9R1	Milk Ranch	33	8N	23E	7000	Salt
12R3	Mingus Mountain	3	15N	2E	7100	Verde
8S2	Mogollon	2	11S	19W**	7000	San Francisco
11R4	Mormon Lake	13	18N	8E	7350	Little Colorado
11R3-M	Mormon Mountain (p)	14	18N	8E	7500	Verde
9S12-A	Mt. Ord	4	6N	26E	11000	Salt
11R1-M	Munds Park	15	18N	7E	6500	Verde
11P5-M	Newman Park	25	19N	6E	6750	Verde
9S4	Nutriosio	23	6N	30E	8500	San Francisco
9S5	Pacheta	27	4-1/2N	27E	7800	Salt
8S7	Redstone Trail	5	11S	18W**	8600	San Francisco
10T2	Rose Canyon	15	12S	16E	7300	Gila
8S8	Silver Creek Divide	4	11S	18W**	9000	San Francisco
9S14-A	Smith Cienega	10	6N	26E	9850	Salt
11P4	Snow Bowl #1 (p)	36	23N	6E	10260	Verde
11P6	Snow Bowl #2	31	23N	7E	11000	Verde
9S8	State Line	6	6S	21W**	8000	San Francisco
12R5	White Spar	19	13N	2W	6000	Verde
12P2	White Horse Lake Jct	2	20N	2E	7150	Verde
8S10-A	Whitewater	19	11S	17W**	10750	Gila
12P3	Williams Ski Run	9	21N	2E	7720	Lower Colorado
13P1	Willow Ranch	16	21N	11W	5000	Bill Williams
9R6	Wilson Lake (p)	4	7N	26E	9000	Salt
10S1	Workman Creek	33	6N	14E	6900	Salt

M SOIL MOISTURE STA.

(p) STORAGE GAGE

A AERIAL SNOW DEPTH MARKER

** SOIL MOISTURE STA. ONLY

*** NM PRINCIPAL MERIDIAN

ARIZONA WATER SUPPLY OUTLOOK

JANUARY 15, 1968

* * * * *
* The Water Supply Outlook for Arizona is excellent. The severe Decem- *
* ber storm resulted in the heaviest snow cover on record for so early *
* in the year. Much above normal runoff is anticipated this season. *
* * * * *

SNOW COVER

The snowfall between December 12 and 20 was the heaviest on record for such a short period. Water contents at snow courses above 5000' ranged from 6 to 18" with an average of 10.6". Greater amounts of snow have never been measured on January 15, although many of the higher elevation snow courses have had higher water contents later in the winter. All-time record amounts are present at most stations below 8000'. Snow cover is now 3-1/2 to 5-1/2 times average for this date. Snow depths have settled greatly from what they were at the end of the storm, but water contents are virtually unchanged. Below 6000' the snow is melting slowly and infiltrating into the soil, producing relatively little runoff.

PRECIPITATION

Because of the rapid accumulation of snow in the December storm, many of the precipitation storage gages filled up and capped over, resulting in under measurements. Nevertheless, most stations received record December precipitation. The U.S. Weather Bureau reports 3 to 5 times normal amounts of precipitation occurred during December at their weather stations.

RESERVOIR STORAGE

Stored water in Arizona reservoirs is very good, but not as high as it was two years ago. Salt River Project reservoirs presently containing 73% of capacity are at levels twice the average for this date. Storage in San Carlos Reservoir is 7-1/2 times average, but only 27% of capacity. Some Northern Arizona reservoirs are low, but filling these this spring is assured. Salt River Project reservoirs should be virtually full this spring if storm patterns and consequent runoff follows an orderly pattern.

SOIL MOISTURE

Soil moisture is generally good, especially at the lower elevations. Many stations, however, are still several inches below field capacity, as significant melting has not yet occurred.

STREAMFLOW AND WATER SUPPLY

December rains on the lower elevations of the watershed produced 178,000 acre feet into the Salt River Project reservoirs. The last few weeks the flow has moderated with a yield of 50,500 acre feet the first half of January. The Gila River near Safford ran 48,240 acre feet in December.

Good water supplies are assured in all areas of Arizona served by surface flow. Streamflow forecasts will be made after the February 1 snow survey.

STATUS OF ARIZONA RESERVOIR STORAGE - ABOUT JANUARY 15, 1968

SUB- WATERSHED and/or STREAM	RESERVOIR	USABLE CAPACITY 1000's ACRE FEET	USABLE STORAGE - 1000s ACRE FEET			15-Year Average 1948-62
			1968	1967	1966	
<u>GILA RIVER DRAINAGE</u>						
Agua Fria	Lake Pleasant	157.6	144.7	126.7	157.5	26.9
Granite	Watson Lake	4.7	1.4	3.0	4.6	---
Granite	Willow Creek	6.1	1.6	3.9	6.1	---
Gila	San Carlos	1,206.0	325.9	324.0	353.0	43.0
Verde	Bartlett	179.5	85.3	142.8	153.3	48.0
Verde	Horseshoe	142.8	3.8	61.7	119.0	20.0
Salt	Roosevelt	1,382.0	1,063.5	1,140.9	1,209.5	385.1
Salt	Apache	245.0	238.9	231.5	238.7	187.6
Salt	Canyon	58.0	51.5	44.9	53.8	43.1
Salt	Saguaro	70.0	67.5	47.1	50.8	42.2
<u>COLORADO RIVER DRAINAGE</u>						
Colorado	Lake Havasu	619.4	540.9	545.9	555.8	546.9
Colorado	Lake Mohave	1,810.0	1,664.4	1,582.0	1,785.0	1,595.7*
Colorado	Lake Mead	27,207.0	14,469.0	15,555.0	15,328.0	17,704.7
Colorado	Lake Powell	25,002.0	8,219.0	7,733.6	8,865.3	---
Little Colorado	Lyman	30.6	17.8	17.5	19.3	6.6
Little Colorado	Show Low Lake	5.1	0.5	.6	5.1	0.7*

* Average is for less than 15 years of record in the 1948-62 period.

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JACKSON, V. S.	Ph.D.	1922	1923	Psychology	Ph.D.
KELLEY, W. T.	Ph.D.	1924	1925	Geography	Ph.D.
LEWIS, X. U.	Ph.D.	1926	1927	Art History	Ph.D.
MARTIN, Y. V.	Ph.D.	1928	1929	Music	Ph.D.
NICHOLS, Z. W.	Ph.D.	1930	1931	Theology	Ph.D.
OLIVER, A. X.	Ph.D.	1932	1933	Education	Ph.D.
PERKINS, B. Y.	Ph.D.	1934	1935	Anthropology	Ph.D.
ROBERTS, C. Z.	Ph.D.	1936	1937	Literature	Ph.D.
SMITH, D. A.	Ph.D.	1938	1939	Statistics	Ph.D.
THOMAS, E. B.	Ph.D.	1940	1941	Botany	Ph.D.
WATSON, F. C.	Ph.D.	1942	1943	Zoology	Ph.D.
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YOUNG, H. E.	Ph.D.	1946	1947	Geology	Ph.D.

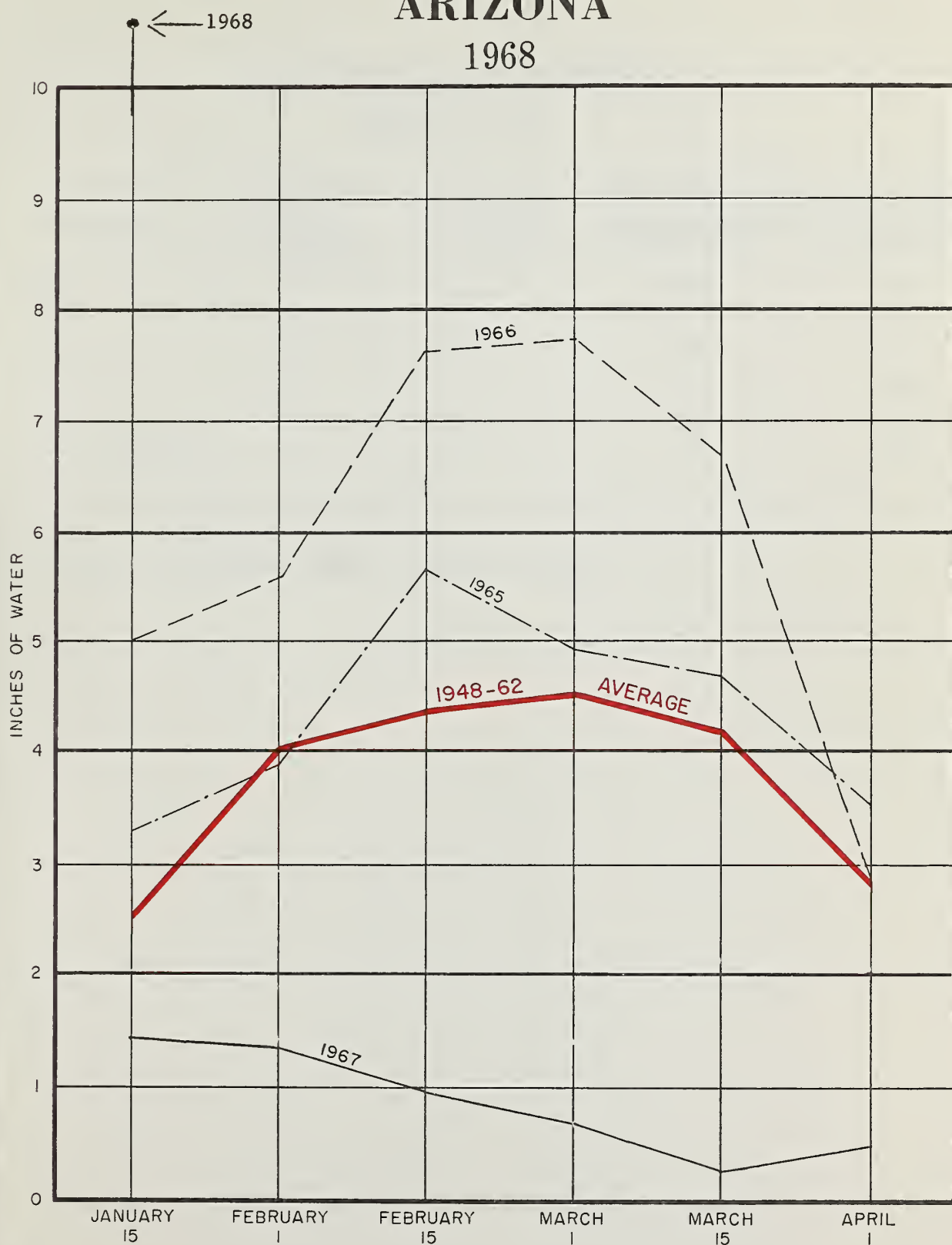
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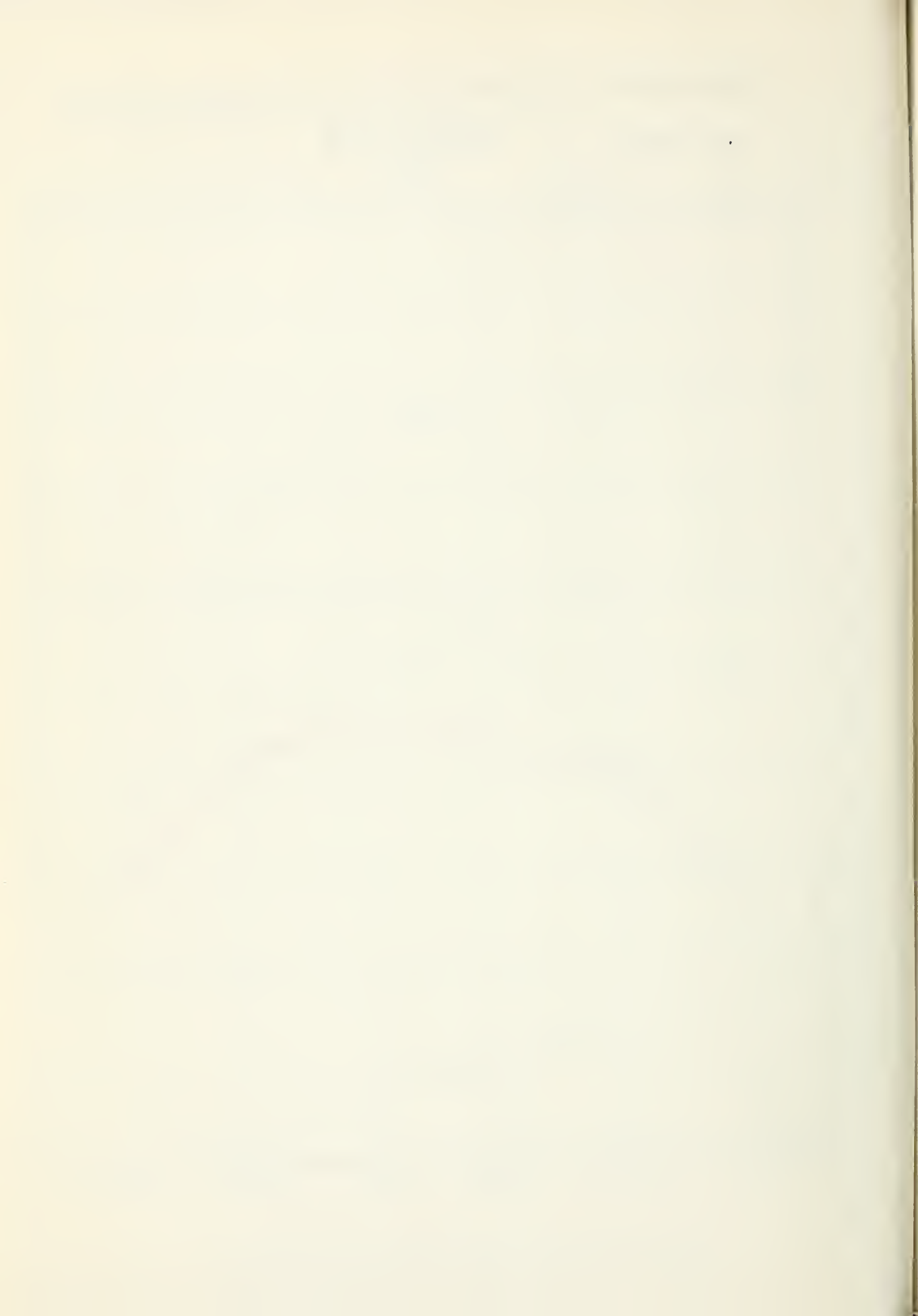
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RELATIVE SNOW WATER ACCUMULATION ARIZONA

1968



This graph represents the average snow water content on eleven selected snow courses on Arizona Sub-Watersheds.



SNOW COVER ON ARIZONA WATERSHEDS

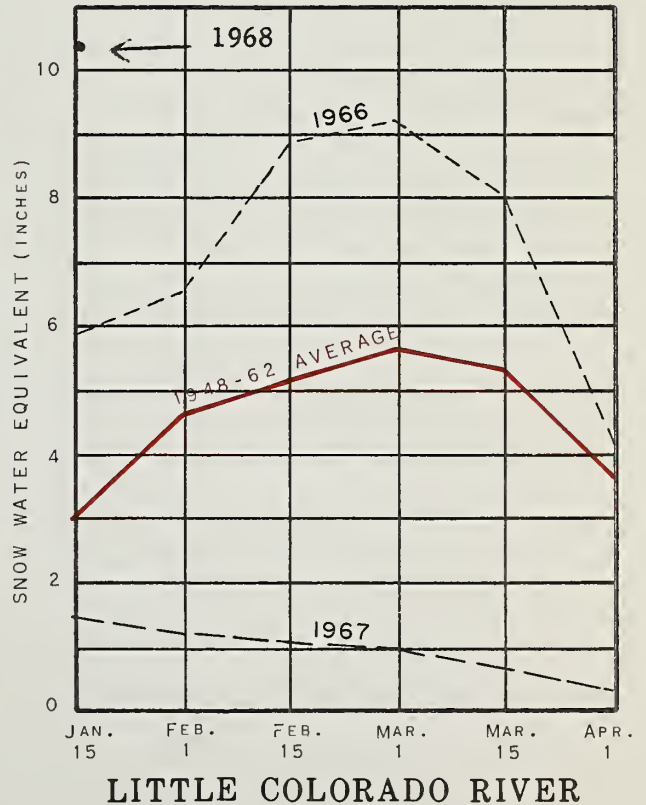
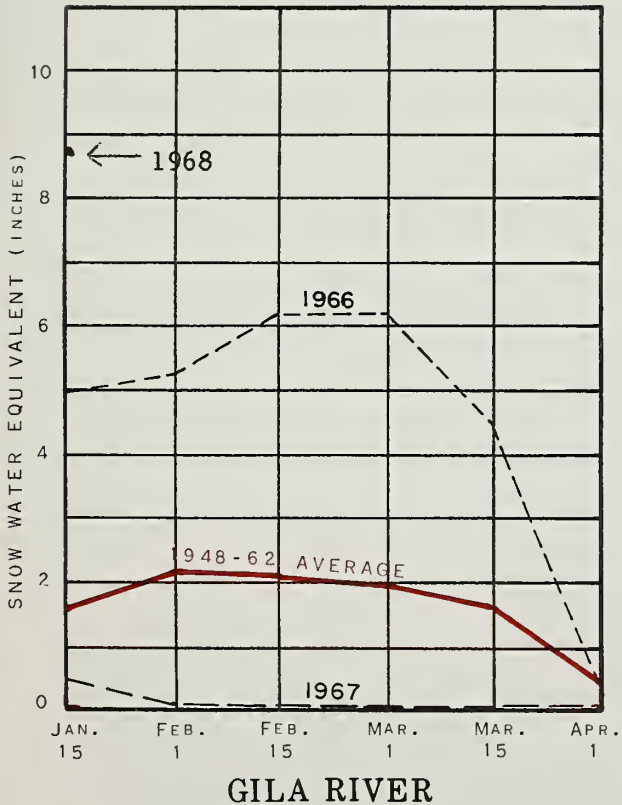
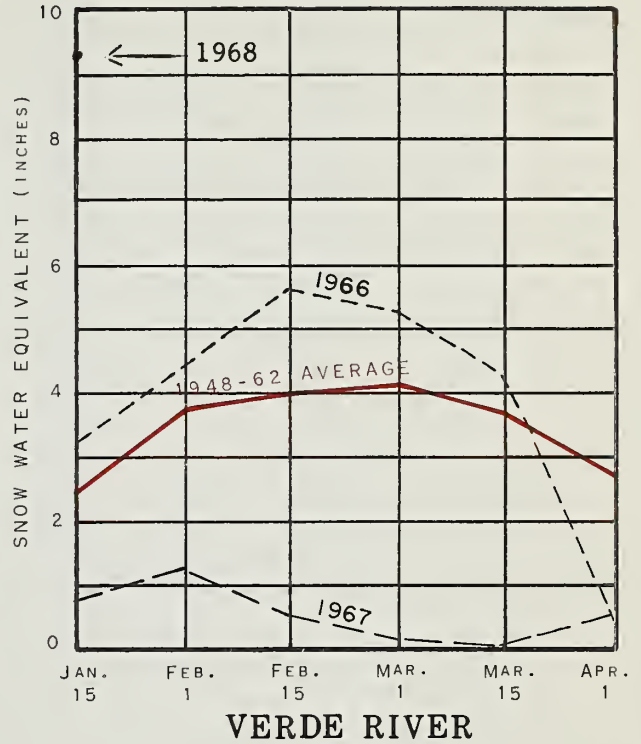
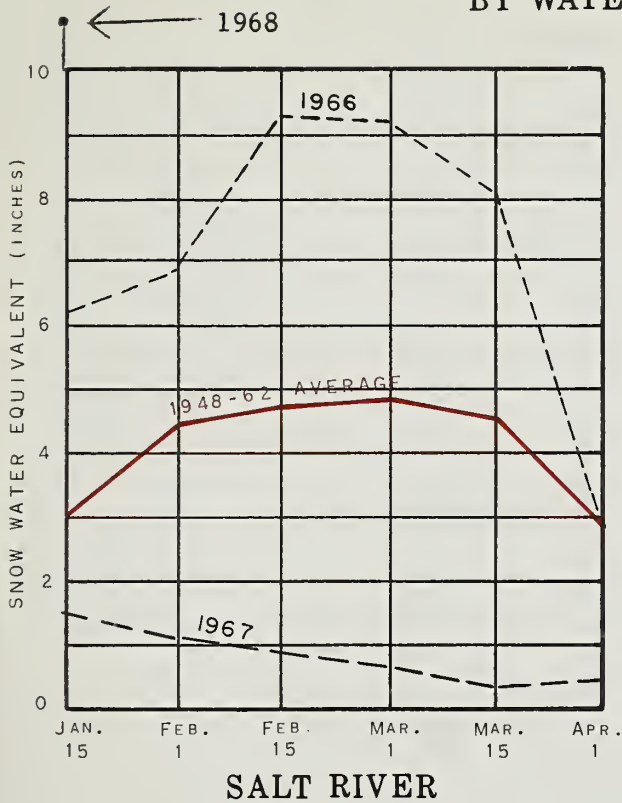
JANUARY 15, 1968

Watershed	No. of Courses Average	Water Content of Snow (Inches)	This Year's Water Content of Snow Expressed as Percent of:	
			Last Year	Average *
Gila	7	8.8	1766%	542%
Salt	10	10.8	821%	404%
Verde	7	9.3	1204%	392%
Little Colorado	4	10.4	657%	351%

* Actual or Estimated 1948-62, 15-year Average.

1968

ARIZONA SNOW COVER BY WATERSHEDS



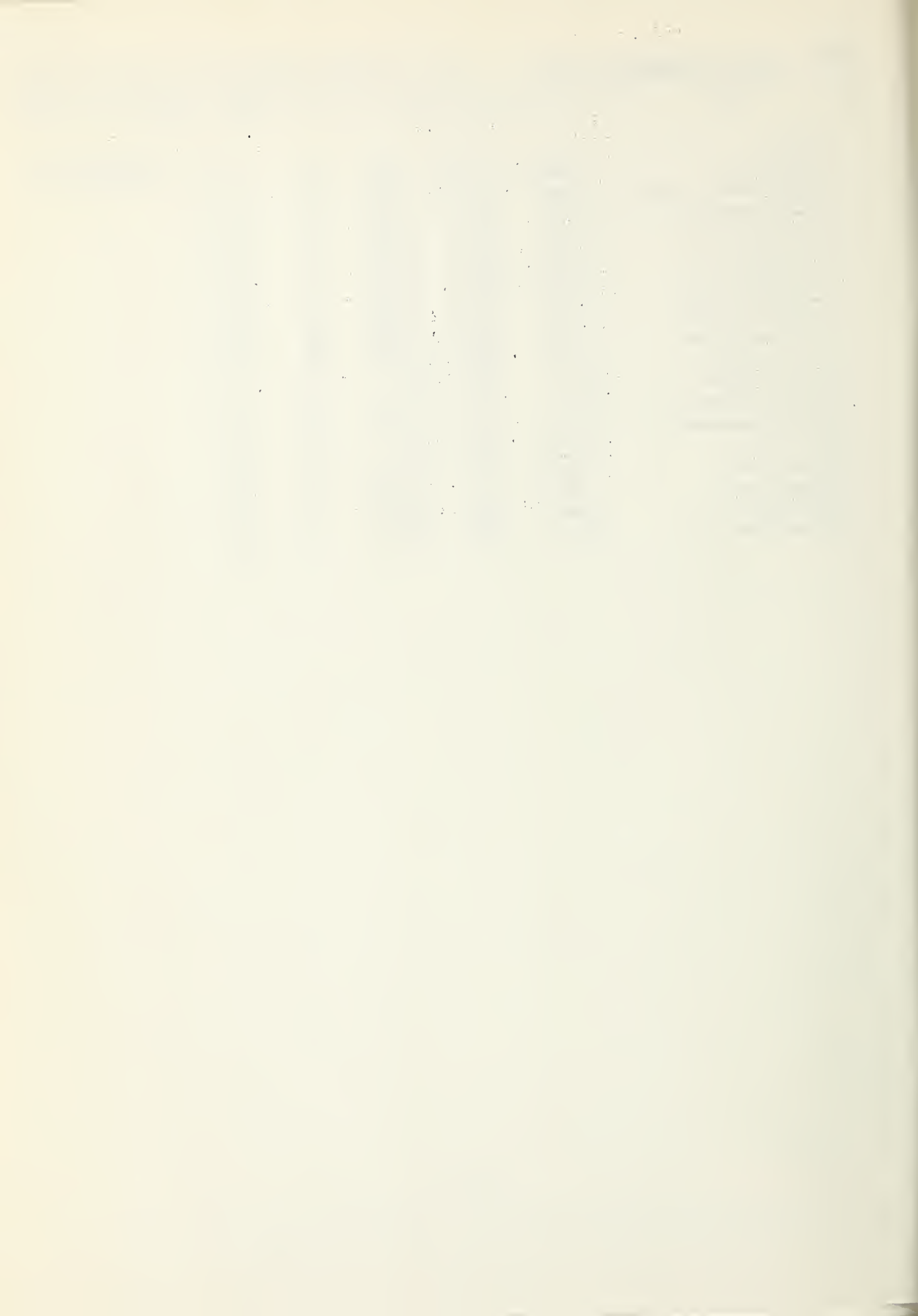
BASED ON SELECTED SNOW SURVEY COURSES

SNOW

ABOUT DECEMBER 30, 1967

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
NAME	NO.	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
						LAST YEAR	AVERAGE ^a
Baldy *	9S1	9125	1/2	42	12.6	NO RECORD FOR THIS PERIOD.	
Chalender	12P1-M	7100	12/27	29	6.7		
Copper Basin Divide	12R6	6720	12/27	37	11.3		
Crazy Horse (A)	9T2-A	10200	12/21	60	12.0		
Ft. Valley	11P2	7350	12/28	24	6.1		
High Peak (A)	9T1-A	10600	12/21	84	13.4		
Hummingbird (A)	8S9-A	10500	12/28	66	16.5		
Inner Basin #1	11P9	10100	12/30	51	15.0		
Inner Basin #2	11P8	9750	12/30	43	12.3		
Inner Basin #3	11P7	10250	12/30	48	15.9		
Iron Springs *	12R2	6200	12/27	27	7.7		
Maverick Fork	9S2	9050	1/2	44	13.1		
McKnight Cabin * (A)	7S3	9300	12/28	33	8.2		
Mormon Mountain	11R3-M	7500	12/29	37	10.8		
Mt. Ord (A)	9S12-A	11000	1/2	74	16.2		
Munds Park	11R1-M	6500	12/28	29	8.6		
Newman Park	11P5-M	6750	12/28	32	9.3		
White Spar	12R5	6000	12/27	31	9.0		
Whitewater (A)	8S10-A	10750	12/28	72	16.6		

(a) 1948-62, 15 year period. (*) Adjacent drainage. (**) 1948-62 Adjusted Average. (A) Aerial observation: Water content estimated.



SNOW ABOUT JANUARY 15, 1968

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE ^a

GILA RIVER

Bear Wallow	10T1	8100	1/15	38	14.7	0.5	2.9
Beaver Head	9S6	8000	1/14	38	12.5	0.7	2.4
Coronado Trail	9S7	8000	1/15	31	11.6	0.3	2.2
Crazy Horse (A)	9T2-A	10200	12/21	60	12.0	4.0	--
Emory Pass #1 *	7T1	7800	1/11	14	3.7	0.0	--
Emory Pass #2 *	7T2	7800	1/11	24	7.2	0.0	--
Frisco Divide	8S1-M	8000	1/16	31	9.7	0.8	1.7
Hannagan Meadows *	9S11	9090	No Survey			1.7	--
High Peak (A)	9T1-A	10500	12/21	84	13.4	3.0	--
Hummingbird (A)	8S9-A	10550	1/5	65	17.6	0.0	--
Ice King	8S6	8020	1/14	38	11.2	1.4	--
Inman	7S2	7800	1/15	9	2.1	0.0	0.5
McKnight Cabin *	7S3 -A	9300	12/28	33	8.2	0.7	--
Mogollon	8S2	7000	1/14	26	7.3	0.6	1.2**
Nutrioso	9S4	8500	1/15	25	8.6	0.3	1.6
Redstone Trail	8S7	8600	1/14	41	12.9	2.0	--
Rose Canyon	10T2	7300	1/15	29	11.6	0.6	1.6
Silver Creek Divide	8S8	9000	1/14	53	16.1	3.3	--
State Line	9S8	8000	1/16	33	10.0	0.8	1.8
Whitewater (A)	8S10-A	10750	1/15	70	18.2	3.0	--

SALT RIVER

Baldy *	9S1	9125	1/15	35	11.3	2.4	4.0**
Beaver Head	9S6	8000	1/14	38	12.5	0.7	2.4
Canyon Creek	10R7-M	7500	1/14	35	11.8	1.7	1.6**
Canyon Point	10R9	7600	1/14	36	12.5	2.0	--
Coronado Trail	9S7	8000	1/15	31	11.6	0.3	2.2
Forest Dale	10R6	6430	1/15	25	9.3	1.6	0.7
Ft. Apache	9R5	9160	1/15	36	11.5	2.6	4.5**
Hannagan Meadows	9S11	9090	No Survey			1.7	--
Hawley Lake	9R10	8300	1/15	35	10.9	1.2	--
Heber	10R4	7600	1/14	35	12.3	1.5	1.8**
Maverick Fork	9S2	9050	1/15	38	12.8	2.8	5.7**
McNary	9R2-M	7200	1/15	31	10.0	1.0	1.7
Milk Ranch	9R1	7000	1/15	27	8.0	0.8	1.0
Mt. Ord (A)	9S12-A	11000	1/2	74	16.2	5.5	--
Nutrioso *	9S4	8500	1/15	25	8.6	0.3	1.6
Pacheta	9S5	7800	DISCONTINUED			1.3	2.9**
Smith Cienega (A)	9S14-A	9850	1/2	60	15.5	3.8	--
Wilson Lake	9R6	9000	1/15	39	12.2	3.9	--
Workman Creek	10S1	6900	1/11	50	18.4	1.1	3.5**

BILL WILLIAMS RIVER

Camp Wood *	12R1	5700	Report Delayed			0.0	0.9
Copper Basin Divide	12R6	6720	1/15	30	10.1	0.8	--
Iron Springs	12R2	6200	1/15	19	6.7	0.2	1.4
Willow Ranch	13P1	5000	1/15	0	0	0.0	1.0

(a) 1948-62, 15 year period. (*) Adjacent drainage. (**) 1948-62 Adjusted Average. (A) Aerial observation: Water content estimated.

SNOW ABOUT JANUARY 15, 1968

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE ^a

VERDE RIVER

Baker Butte	11R6	7300	1/14	44	15.6	1.0	--
Camp Wood	12R1	5700	Report Delayed			0.0	0.9
Chalender	12P1-M	7100	1/12	25	8.1	0.9	2.3
Copper Basin Divide	12R6	6720	1/15	30	10.1	0.8	--
Fort Valley	11P2	7350	1/15	21	6.3	0.6	1.7
Gaddes Canyon	12R4	7600	1/15	41	14.1	0.7	3.4**
Happy Jack	11R5	7630	1/12	31	8.7	0.9	2.2**
Iron Springs *	12R2	6200	1/15	19	6.7	0.2	1.4
Mingus Mountain	12R3	7100	1/15	24	8.6	0.0	0.9
Mormon Lake *	11R4	7350	1/15	31	10.4	1.1	2.3
Mormon Mountain	11R3-M	7500	1/15	33	10.7	1.0	3.3**
Munds Park	11R1-M	6500	1/15	25	7.8	0.5	1.5**
Newman Park	11P5-M	6750	1/15	25	8.2	0.6	--
Snow Bowl #1	11P4	10260	1/14	30	9.9	9.0	--
Snow Bowl #2	11P6	11000	1/14	51	14.7	12.8	--
White Spar	12R5	6000	1/15	21	8.0	0.3	--
White Horse Lake Jct.	12P2	7150	1/12	30	9.9	0.7	--

LOWER COLORADO RIVER

Bill Williams Summit	12P4	8950	1/12	38	11.7	5.6	--
Bill " Intermediate	12P5	8550	1/12	37	12.2	3.3	--
Bright Angel	12N1	8400	No Survey			--	5.4**
Chalender *	12P1-M	7100	1/12	25	8.1	0.9	2.3
Fort Valley	11P2	7350	1/15	21	6.3	0.6	1.7
Grand Canyon	11P1	7500	1/15	17	5.4	0.9	1.7
Williams Ski Run	12P3	7720	1/12	37	12.0	1.0	--

LITTLE COLORADO RIVER

Baldy	9S1	9125	1/15	35	11.3	2.4	4.0**
Canyon Creek	10R7-M	7500	1/14	35	11.8	1.7	1.6**
Canyon Point	10R9	7600	1/14	36	12.5	2.0	--
Forest Dale	10R6	6430	1/15	25	9.3	1.6	0.7
Ft. Apache	9R5	9160	1/15	36	11.5	2.6	4.5**
Fort Valley	11P2	7350	1/15	21	6.3	0.6	1.7
Happy Jack *	11R5	7630	1/12	31	8.7	0.9	2.2**
Heber	10R4	7600	1/14	35	12.3	1.5	1.8**
Inner Basin #1	11P9	10100	12/30	51	15.0	--	--
Inner Basin #2	11P8	9750	12/30	43	12.3	--	--
Inner Basin #3	11P7	10250	12/30	48	15.9	--	--
McNary	9R2-M	7200	1/15	31	10.0	1.0	1.7
Mormon Lake	11R4	7350	1/15	31	10.4	1.1	2.3
Mormon Mountain	11R3-M	7500	1/15	33	10.7	1.0	3.3**
Nutriosos	9S4	8500	1/15	25	8.6	0.3	1.6
Snow Bowl #1	11P4	10260	1/14	30	9.9	9.0	--
Snow Bowl #2	11P6	11000	1/14	51	14.7	12.8	--
Wilson Lake *	9R6	9000	1/15	39	12.2	3.9	--

(a) 1948-62, 15 year period. (*) Adjacent drainage. (**) 1948-62 Adjusted Average. (A) Aerial observation: Water content estimated.

PRECIPITATION AT SELECTED ARIZONA STATIONS ^{1/}

STATION	Precipitation (Inches)			
	December - 1967		Current Water-Year (Oct. 1967 - Dec. 1967)	
	Departure from		Departure from	
	Total	Average	Total	Average
Alpine	7.07	+ 5.80	8.49	+ 4.69
Ash Fork	2.72	+ 1.54	4.00	+ 1.40
Clifton	4.55	+ 3.53	5.20	+ 2.74
Douglas Smelter	4.22	+ 3.55	5.32	+ 3.55
Flagstaff WBAS*	7.30	+ 5.65	8.14	+ 3.97
McNary	10.73	+ 8.36	12.66	+ 7.02
Payson Ranger Station	9.23	+ 7.33	11.61	+ 6.86
Phoenix WBAS	3.98	+ 3.13	5.92	+ 4.12
Prescott	6.08	+ 4.31	7.46	+ 3.39
Tucson WBAS	3.44	+ 2.52	4.95	+ 2.77
Winslow WBAS	3.73	+ 3.21	4.20	+ 2.66
Yuma WBAS	.65	+ .33	2.10	+ 1.28

^{1/} Data and Analysis furnished by Paul C. Kangieser,
Arizona State Climatologist, U. S. Weather Bureau
ESSA, Tempe.

* WBAS = Weather Bureau Airport Station.

PRECIPITATION

STORAGE GAGE DATA - ABOUT JANUARY 15, 1968

Drainage Basin and Storage Gage	Elev.	Current Data		1948-62	From Approx. 11/1 to Date		
		Date of Jan. 1-15	Precip.	Av. Precip. Jan. 1-15	This Year	1948-62 Average	% of Average
<u>GILA RIVER</u>							
Silver Creek Divide	9000	1/14/68	.50#	---	18.97	---	---
Hannagan Meadows	9030	No Report		1.65*	---	6.86*	---
<u>SALT RIVER</u>							
Canyon Point	7600	1/14/68	.25#	---	14.95	---	---
Hannagan Meadows	9030	No Report		1.65*	---	6.86*	---
Little Wildcat (Heber Snow Course)	7600	1/14/68	.20#	2.03*	13.17	6.19*	213
Maverick Fork	9050	1/15/68	.60#	1.42*	12.34#	5.46*	226
Workman Creek **	6970	1/11/68	.22	2.31	15.79	8.39	188
Wilson Lake	9100	1/15/68	.50#	---	13.60	---	---
<u>VERDE RIVER</u>							
Baker Butte	7300	1/14/68	.30#	---	15.75	---	---
Copper Basin Divide	6720	1/15/68	.07	---	11.81	---	---
Fort Valley **	7350	1/15/68	.02	1.23	8.52	4.08	208
Happy Jack **	7480	1/12/68	.10#	1.71*	8.44	5.40*	156
Mingus Mountain	7660	1/15/68	.50#	1.49	18.92	4.39	432
Mormon Mountain	7500	1/15/68	.46	---	12.10	---	---
<u>LITTLE COLORADO</u>							
Inner Basin #1	9830	12/30/67	---	---	9.04	---	---
Inner Basin #2	10050	12/30/67	---	---	8.75	---	---
Sheep Crossing (Baldy Snow Course)	9125	1/15/68	.50#	1.30*	11.26#	4.92*	229
Little Wildcat (Heber Snow Course)	7600	1/14/68	.20#	2.03*	12.97	6.19*	210

* 1948-62 Adjusted Average

** Data supplied by U.S. Forest Service

Partially estimated.

ARIZONA SOIL MOISTURE - ABOUT JANUARY 15, 1968

Drainage Basin and Station	<u>1/</u> Station Number	Elev.	Soil Profile		Soil Moisture Content in Inches				
			Depth	Cap.	Date	1968	1967	Past Record 1966	Avg.
<u>GILA RIVER</u>									
Frisco Divide	8S1-M	8000	48	13.3	10/19 1/16	10.3	7.2 7.9	-- 9.4	-- 10.4
<u>SALT RIVER</u>									
Black River Divide	9S10-*	9100	48	16.8	10/17 1/15	17.2	17.4 14.8	-- 18.1	-- 13.8
Canyon Creek	10R7-M	7500	48	18.3	10/6 1/14	14.2	17.6 18.7	-- 18.2	-- 14.1
Corduroy Creek	10R8-*	6000	36	13.5	9/ 8 1/15	14.1	9.2 7.4	-- 12.8	-- 7.4
McNary	9R2-M	7200	48	16.3	10/20 1/15	13.7	13.3 15.0	-- 17.5	-- 14.2
<u>VERDE RIVER</u>									
Mormon Mountain	11R3-M	7500	48	16.1	10/5 1/15	13.6	11.6 17.6	-- 17.7	-- 14.2
Newman Park	11P5-M	6750	48	17.7	10/3 1/15	14.5	14.6 18.1	-- 19.5	-- 13.5

1/ * - Soil Moisture Station Only

M - Snow Course and Soil Moisture Station

SNOW COURSE

Baker Butte -----
Baldy -----
Bear Wallow -----
Beaver Head -----
Bill Williams Intermediate -----
Bill Williams Summit -----
Bright Angel -----
Camp Wood -----
Canyon Creek -----
Canyon Point -----
Chalender -----
Copper Basin Divide -----
Coronado Trail -----
Crazy Horse -----
Emory Pass -----
Forest Dale -----
Ft. Apache -----
Fort Valley -----
Frisco Divide -----
Gaddes Canyon -----
Grand Canyon -----
Hannagan Meadows -----
Happy Jack -----
Hawley Lake -----
Heber -----
High Peak -----
Hummingbird -----
Ice King -----
Inman -----
Inner Basin #1, #2, #3 -----
Iron Springs -----
Maverick Fork -----
McKnight Cabin -----
McNary -----
Milk Ranch -----
Mingus Mountain -----
Mogollon -----
Mormon Lake -----
Mormon Mountain -----
Mt. Ord -----
Munds Park -----
Newman Park -----
Nutrioso -----
Redstone Trail -----
Rose Canyon -----
Silver Creek Divide -----
Smith Cienega -----
Snow Bowl #1 -----
Snow Bowl #2 -----
State Line -----
White Horse Lake Junction -----
White Spar -----
Whitewater -----
Williams Ski Run -----
Willow Ranch -----
Wilson Lake -----
Workman Creek -----

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The Following Organizations Cooperate in the Arizona Snow Survey Work

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